AGRICULTURAL COUNTIES: THEIR LOCATION, FARMS AND ECONOMIES

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ESS Staff Report No. AGESS810213

February 1981

AGRICULTURAL COUNTIES: THEIR LOCATION, FARMS, AND ECONOMIES, by Robert A. Hoppe. Economic Development Division, Economics and Statistics Service, U.S. Department of Agriculture. February 1981. AGESS810213.

ABSTRACT

Rural people no longer rely primarily on agriculture for their livelihood. The number of agricultural counties receiving at least 20 percent of their total labor and proprietors' income from farming declined from 2,016 in 1950 to 684 in the midseventies. This report documents the decline in counties dependent on agriculture and identifies counties where farming still provides a large portion of income and employment. Counties still depending on agriculture have unique farm and economic characteristics. This report also examines the structure of agriculture in its changing local environment.

KEYWORDS: Economic growth, farms, farm programs, rural development, rural economies.

ACKNOWLEDGMENTS

Dorothy H. Atkins, Sharon Black, Glenda Sims and Micki J. Weimerskirch assisted in preparing the report. Thomas A. Carlin, Kenneth L. Deavers, Max F. Jordan, and Richard W. Long all made useful suggestions.

PREFACE

The Food and Agriculture Act of 1977 expires in 1981. This report is part of an extensive Economics and Statistics Service research program to provide background information for developing new legislation to replace the 1977 Act.

For much of our Nation's history, most rural people lived and worked on farms. Nonfarm people in rural communities processed farm products or provided supplies and services farm families needed. Rural policies and farm policies were virtually synonymous. After World War II, however, technological change in agriculture was accompanied by a massive reduction in the farm population. This phenonmenon, combined with the expansion of nonfarm-related jobs in rural areas, changed rural areas. Most rural people no longer depended on agriculture.

This report traces the dramatic decline in areas dependent of farming since 1950. Rural areas still depending on agriculture are identified, and the structure of agriculture in these areas is examined.

CONTENTS

	Page
Summary	v
Introduction	1
Agricultural Counties Since 1950	1
Location and Number of Agricultural Counties	2
Population of Agricultural Counties	7
Patterns of Dependence on Agriculture	7
Agriculture Today	13
Farm Number and Size	13
Types of Products	13
Farm Operators	17
Farm Programs and Rural America	18
Agriculture in Rural Economies	19
Sources of Income and Employment	19
Growth	21
Agriculture as a Stimulus	24
Implications	27
References	29
Appendix A—Sources and Limitations of BEA Income and Employment Data	31
Definitions	31
Sources of Data	31
Limitations of the Data	32
Additional Data	32
Appendix B—Detailed Census Data	37
Definition Change	37
The 1969 and 1974 Data	37
Appendix C—Additional Agricultural Stabilization and Conservation Service (ASCS) Data	48

SUMMARY

The number of agricultural counties in the United States dropped sharply from 2,016 in 1950 to 684 in the midseventies. These counties, which receive at least 20 percent of their total labor and proprietors' income from farming, contained approximately 23 percent of the total U.S. population in 1950. By the midseventies the percentage had fallen to only 3.8. Agricultural counties became increasingly concentrated in the West North Central States.

Of the 684 agricultural counties in the midseventies, 673 had been consistently agricultural since 1950. These counties had a disproportionate share of the Nation's large farms, those with annual sales over $40,000. In fact, the farms in these counties tended to be both physically and financially large. The average 1974 farm size in this group was 585 acres, substantially larger than the 440-acre national average. These counties harvested over half the Nation's wheat acreage, almost half of the other small grains, and over two-fifths of the sorghum in 1974. Over 40 percent of the Nation's farm program payments went to farmers in these counties in 1979.

Over three-quarters of the farm operators in these consistently agricultural counties reported farming as their principal occupation. Farming was the most important source of personal income, followed by property income and transfer payments. This group had a moderate wage and salary employment growth rate during the seventies.

There were 163 transitional counties that lost their agricultural status after the early seventies. Although these counties may still be dependent on agriculture, other sources of income are growing. Growth of a variety of nonfarm industries was partially responsible for these counties losing their agricultural status. Property income, transfer payments, and government wages and salaries were the most important sources of personal income in these transitional counties.

There were 1,039 counties that were agricultural in 1950 and/or 1959 but have since lost their agricultural status. Many of these formerly agricultural counties are in the South, which explains why the group harvested about half the peanut and tobacco acreage in 1974 and almost two-fifths of the cotton acreage. These counties also had almost half of the Nation's minority farm operators. Transfer payments, property income, and government wages and salaries were the most important sources of personal income. The group had high employment and population growth rates.

Some counties may have had a large farm sector, but still had less than 20 percent of their labor and proprietors' income from farming. Agriculture was important in these counties, but it was overshadowed by other industries. Although this overshadowed group of 374 counties had a smaller average farm size than any other group, it harvested large acreages of corn, soybeans, cotton, tobacco, small grains other than wheat, fruits, and vegetables in 1974.

Simply examining the size of the farm sector understates the importance of agriculture to rural economies. Agriculture can serve as a stimulus to other businesses. For instance, a farmer who increases his/her output may buy supplies from a feed manufacturer, a fertilizer dealer, a hardware store, and an implement dealer. Each of these businesses in turn must buy from other firms to supply the farmer. However, agriculture's potential for providing further increases in employment and real income in rural areas may be limited, given the supply of high-quality farm-land, the low income elasticities of farm products, and the undependability of farm exports.

Despite the importance of farming in rural economies, the number of agricultural counties in which farming is a major source of income and employment has declined and will continue to decline as other sources of income and employment grow. A larger share of American farmers will live in areas where farming and related agribusinesses are eclipsed by other businesses. Rural people no longer depend primarily on agriculture for their livelihood, and rural policy and farm policy are no longer synonymous.

AGRICULTURE COUNTIES: THEIR LOCATION, FARMS AND ECONOMIES.

INTRODUCTION

The relationship between agriculture and rural America has changed significantly over the past few decades (5).1/ In most rural counties before World War II, farming and related industries were the primary sources of income and employment. Thus, Federal farm programs were viewed as effective policy tools to be used to enhance the well-being of all rural people. However, technical changes in agricultural production since World War II resulted in a massive release of people from farming. Recent nonfarm employment growth in nonmetropolitan areas significantly changed the complexion of rural communities, and agriculture is no longer the primary sector shaping rural people's future.

This report documents the dramatic decline in areas dependent on farming since 1950 and identifies agricultural counties where farms still provide a large portion of employment and income. Agricultural counties have unique farm and economic characteristics that set them apart from other counties. The report also examines the structure of agriculture in its changing local economic environment and discusses the role of farm program payments in rural economies.

AGRICULTURAL COUNTIES SINCE 1950 2/

A county was considered agricultural in a given year if at least 20 percent of its labor and proprietors' income (LPI) came from farming.3/ LPI, which is the sum of wages, salaries, other labor income, and proprietors' net income, is a measure of local economic activity. The portion of LPI from farming in the years 1950, 1959, 1969-71 and 1975-77 was calculated. A 3-year average was used for the years 1969-71 and 1975-77 to smooth out variations in farm income due to adverse weather or markets.4/ An absence of data for each year in the 1950's and the early 1960's prevented calculating a similar average for the 2 earlier years. Selection of the 20 percent cutoff for counties dependent on farming was based on a ranking of counties by the portion of LPI from farming in 1975-77. The top quintile had percentages of at least 21.6, which was rounded to 20 percent.

1/ Underscored numbers in parentheses refer to items in the References section at the end of the report.

2/ The term county includes parishes in Louisiana, Census Divisions in Alaska, and independent cities.

3/ The sources of data used to identify counties dependent upon agriculture were supplied by the Bureau of Economic Analysis (BEA) of the Department of Commerce (16). The data provided estimates of personal income in each county for 1950, 1959, and 1969 through 1977. Personal income is composed of the wage and salary income, other labor income, proprietors' net income, transfer payments, and property income that the residents of a county receive. See Appendix A for a more detailed description of BEA's income data.

4/ For instance:

$$\text{1969-71 percentage} = \frac{(\text{1969 Farm LPI} + \text{1970 Farm LPI} + \text{1971 Farm LPI})}{(\text{1969 Total LPI} + \text{1970 Total LPI} + \text{1971 Total LPI})} \times 100\%$$

in a given county.

Location and Number of Agricultural Counties

Of the Nation's 3,138 counties, 2,016 were agricultural in 1950 (table 1). The West North Central Division, with 549 agricultural counties, had one-quarter of the total. Agricultural counties were spread across the Nation except in (figure 1):

(1) The New England Census Division; 5/
(2) The Middle Atlantic Census Division;
(3) Coastal areas of the Great Lakes in the East North Central Census Division and Minnesota;
(4) Coastal areas of the Pacific Ocean from Northern California to Canada;
(5) A belt running from southwestern California and southern Nevada to parts of New Mexico;
(6) Some of the mountainous areas of Montana, Idaho, Wyoming, and Colorado;
(7) And scattered areas throughout the South.

Between 1950 and 1959, the number of agricultural counties decreased by one-third (table 1). The decrease in agricultural counties was particularly noticeable in the Western and Southern Census Divisions (figure 2). 6/

By 1969-71, the Western and Southern agricultural counties had thinned out even more (table 1). No agricultural counties remained in the Middle Atlantic Division, and only two remained in New England. The largest contiguous block of agricultural counties formed a rough triangle with its apexes in eastern Montana, western Wisconsin,and west-central Texas (figure 3). Other, smaller groups of agricultural counties were in:

(1) Central California;
(2) Eastern Washington, eastern Oregon and southern Idaho;
(3) Arkansas, Mississippi, and Louisiana;
(4) Central Kentucky;
(5) South-central Florida;
(6) Southern Georgia and a few northern Florida counties;
(7) Eastern North Carolina;
(8) And eastern Illinois and Western Indiana.

5/ Census Divisions and their component States are:
New England: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut.
Middle Atlantic: New York, New Jersey, and Pennsylvania.
East North Central: Ohio, Indiana, Illinois, Michigan, and Wisconsin.
West North Central: Minnesota, North Dakota, South Dakota, Iowa, Nebraska, Missouri, and Kansas.
South Atlantic: Delaware, Maryland, West Virginia, Virginia, North Carolina, South Carolina, Georgia, and Florida.
East South Central: Kentucky, Tennessee, Alabama, and Mississippi.
West South Central: Arkansas, Louisiana, Oklahoma, and Texas.
Mountain: Montana, Idaho, Wyoming, Nevada, Utah, Colorado, Arizona, and New Mexico.
Pacific: Alaska, Hawaii, Washington, Oregon, and California.

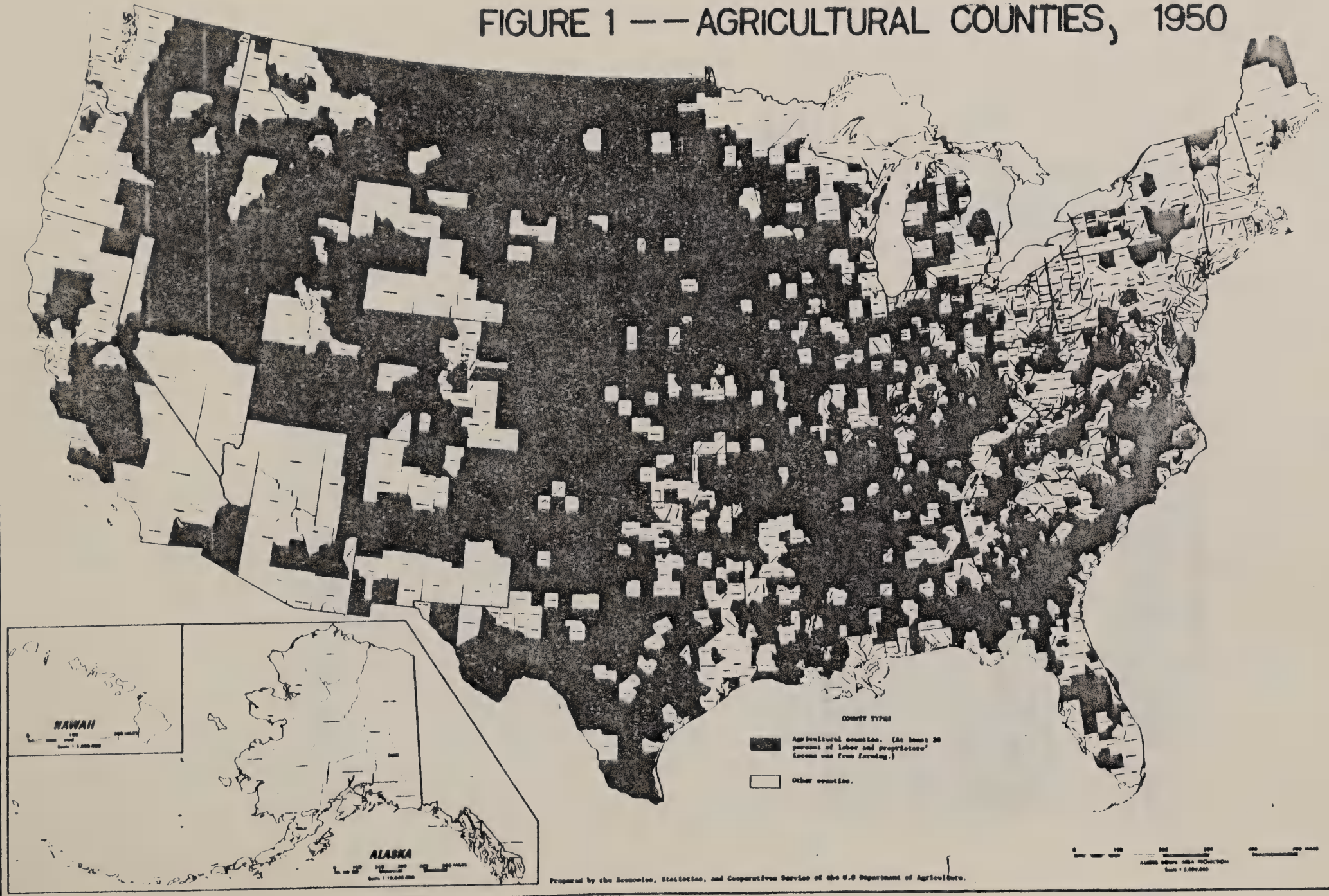
6/ Note that some Hawiian counties that were not agricultural in 1950 were agricultural in 1959. No ratios were calculated for Hawaii or Alaska in 1950 because the BEA did not keep statistics on Alaska and Hawaii prior to their statehood in 1959.

Table 1—Agricultural counties by division

Census division	Total counties in 1977 1/	Agricultural counties: 1950 2/	1959	1969-71	1975-77
		Number			
New England	67	9	6	2	1
Middle Atlantic	150	24	3	0	0
East North Central	436	235	109	68	76
West North Central	619	549	434	399	295
South Atlantic	588	323	198	94	66
East South Central	364	279	184	99	55
West South Central	470	348	245	148	101
Mountain	278	188	136	105	67
Pacific	166	61	40	26	23
Total	3,138	2,016	1,355	941	684

1/ Total number of counties varies slightly from year to year, due largely to the continual creation of independent cities in Virginia.
2/ Excludes Alaska and Hawaii.
Source: (16).

FIGURE 1 -- AGRICULTURAL COUNTIES, 1950



Prepared by the Economics, Statistics, and Cooperatives Service of the U.S Department of Agriculture.

FIGURE 2--AGRICULTURAL COUNTIES, 1959

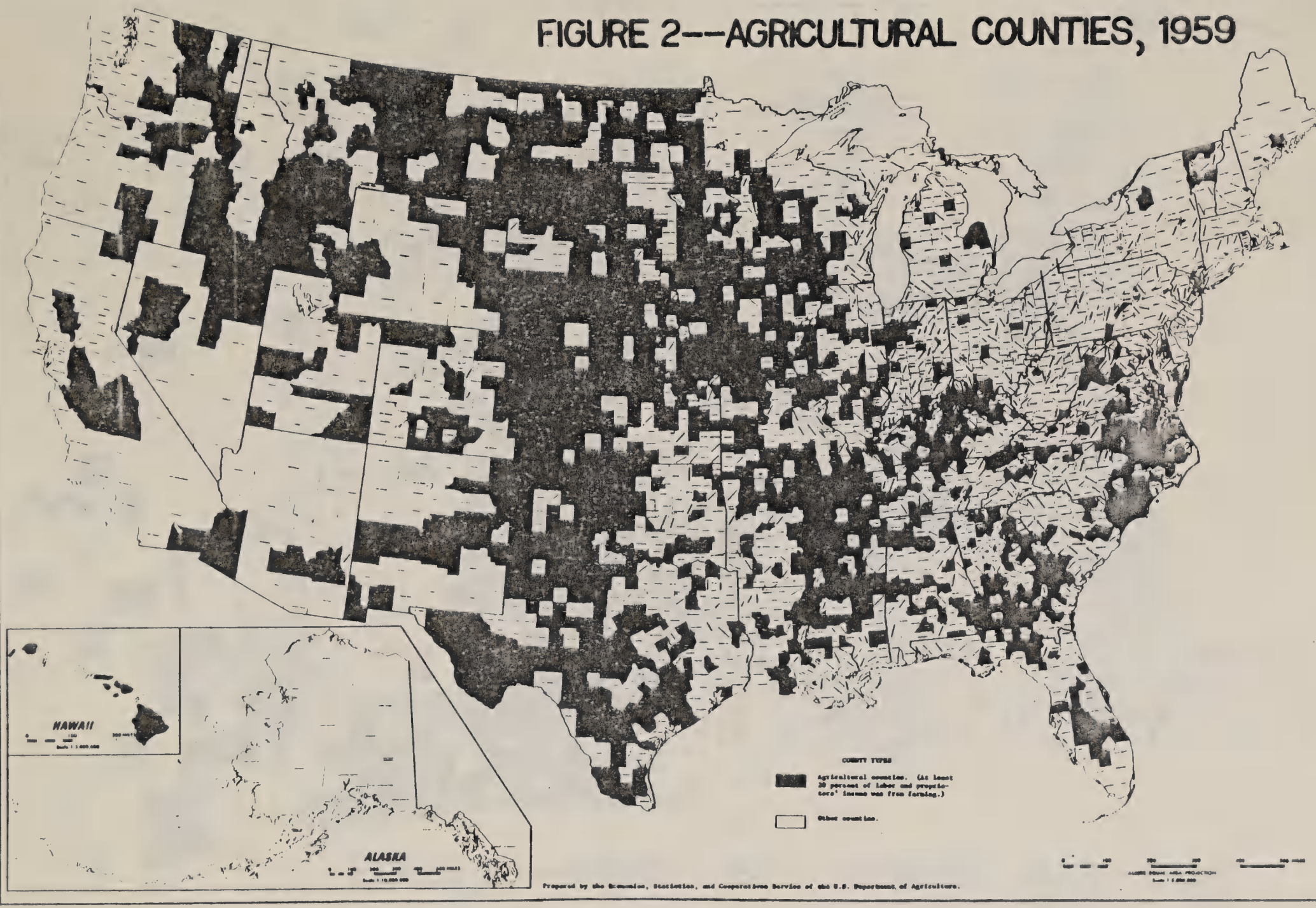


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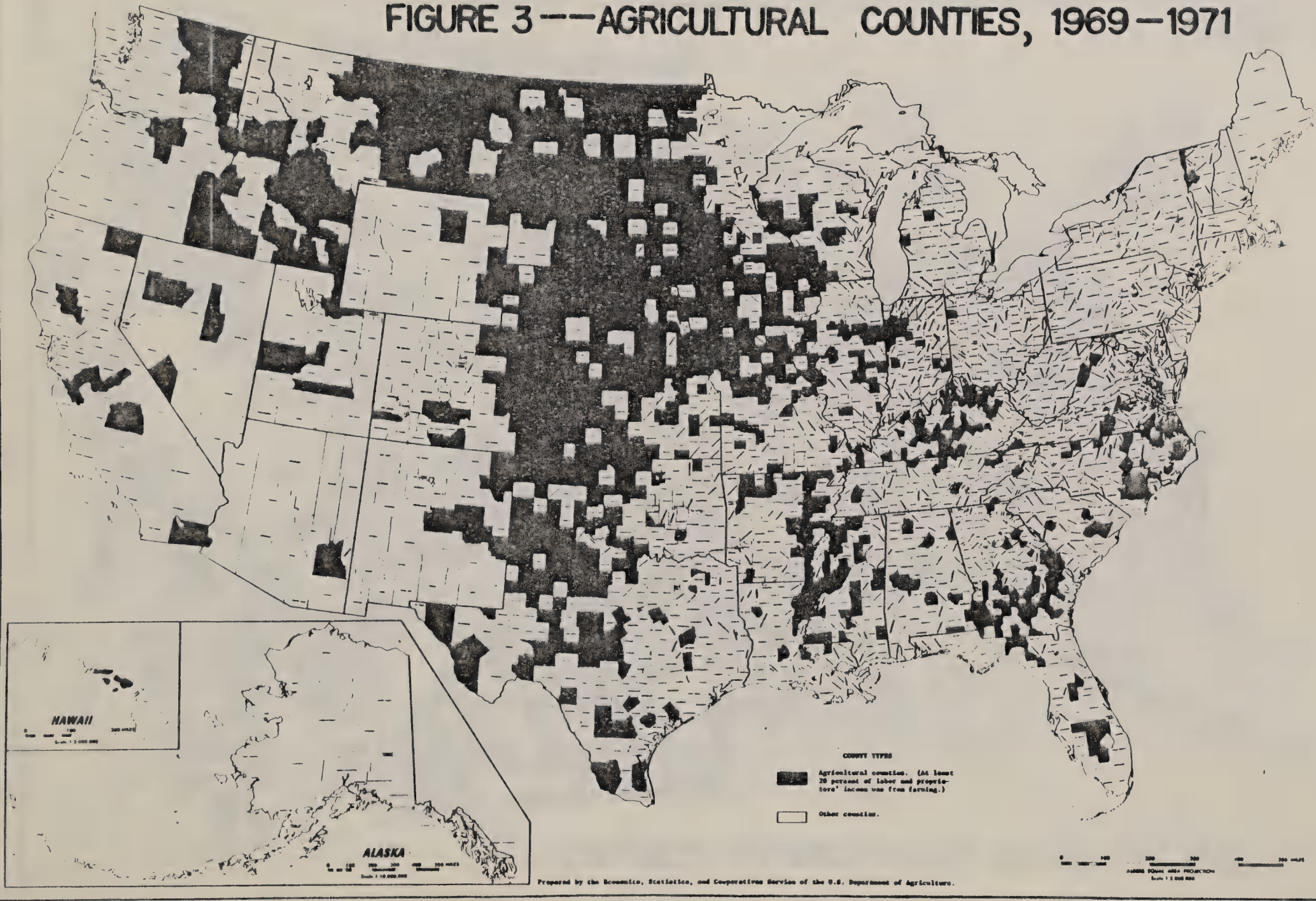
FIGURE 3--AGRICULTURAL COUNTIES, 1969-1971



The groups described for 1969-71 were still discernable in 1975-77 (figure 4). The number of agricultural counties, however, had decreased, and the groups were smaller. Even the central triangle had shrunken considerably. The remaining agricultural counties were heavily concentrated in the West North Central Division. In 1975-77 43 percent of the agricultural counties were located in the West North Central Division, compared with only 27 percent in 1950 (table 1). The number of agricultural counties decreased nationally, but the rate of decrease was less in the West North Central Division. The underlying reason for the West North Central Division's slower decline in agricultural counties is the relatively slow growth in nonfarm LPI in many parts of the division.

Population of Agriculture Counties

The total number of people living in agricultural counties decreased from 34.8 million in 1950 to 8.2 million in 1977 (table 2). The number of people in agricultural counties also decreased in each division. The rate of decrease, however, varied among divisions. Thus, areas with slower rates of decline, such as the West North Central Division, increased their share of total U.S. population in agricultural counties. The share increase was most marked in the West North Central Division, which had 21.6 percent of all people in agricultural counties in 1950 and 33.0 percent in 1975-77. The East North Central, Mountain, and Pacific Divisions had less dramatic increases.

The number of people living in agricultural counties was small relative to total population. Approximately 23.0 percent of the total U.S. population lived in agricultural counties in 1950, but the percentage decreased to 3.8 by 1977 (table 3). The West North Central Division had a larger portion of its population in agricultural counties than any other division in all years shown. The division's agricultural counties were sparsely populated, however; agricultural counties made up 47.7 percent of the division's total counties in 1977 but contained only 16 percent of the division's total population.

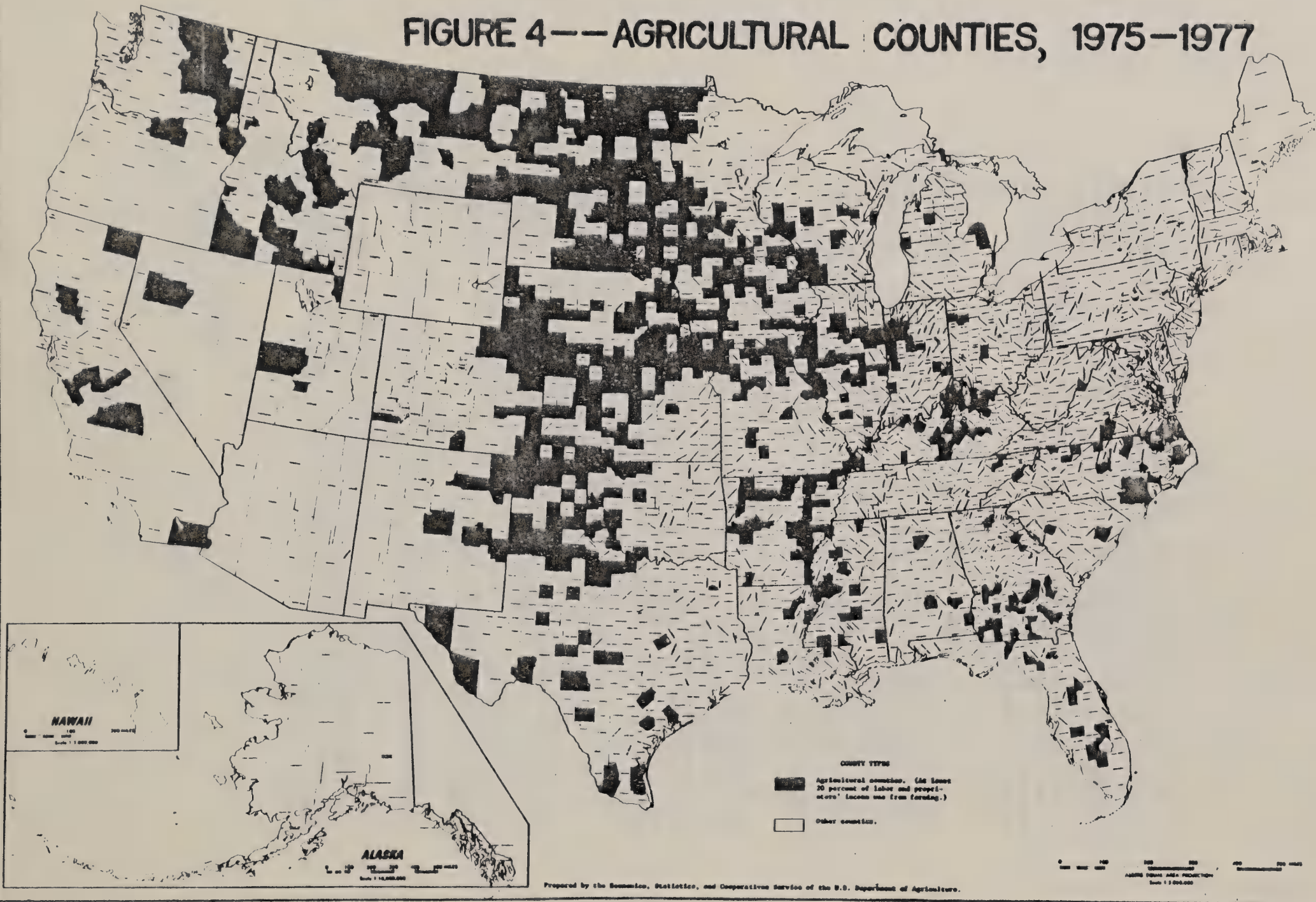
Patterns of Dependence on Agriculture

In figures 1 through 4, certain counties were dependent on agriculture in 1950, 1959, 1969-71, and 1975-77, while others were agricultural in the first three time periods but not in 1975-77. Some counties were agricultural in the 1950's but later became nonagricultural. Other counties never were agricultural in the periods examined. All U.S. counties were sorted into groups in order to reflect these differences in dependence on agriculture. Each group has unique economic characteristics that will be discussed later.

Consistently agricultural--Consistently agricultural counties were agricultural in 1975-77 and in at least two of the other three earlier time periods. The 673 counties in the group have been dependent on agriculture since 1950.

Transitional--The 163 transitional counties were similar to the consistently agricultural counties, except they had less than 20 percent of their LPI from agriculture in 1975-77. The counties in the group may have begun a transitional period when agriculture becomes less important and other sources of income are growing.

FIGURE 4--AGRICULTURAL COUNTIES, 1975-1977



Prepared by the Economics, Statistics, and Cooperatives Service of the U.S. Department of Agriculture.

Table 2—Population of agricultural counties by division.

Census division	Population of agricultural counties			
	1950 1/	1959	1969-71 2/	1975-77 3/
	Thousand People			
New England	239.0	110.3	28.0	4.3
Middle Atlantic	735.9	49.4	0.0	0.0
East North Central	5,193.9	2,127.1	1,186.1	1,477.2
West North Central	7,527.4	4,822.4	3,898.8	2,704.7
South Atlantic	5,620.3	3,362.7	1,276.4	953.2
East South Central	5,418.9	2,894.8	1,276.4	688.3
West South Central	5,862.7	3,167.6	1,423.1	999.6
Mountain	1,698.8	1,126.0	748.9	509.8
Pacific	2,533.4	1,906.0	784.5	855.9
Total population in agricultural counties	34,830.3	19,566.3	10,622.2	8,192.9
Total U.S. Population	151,234.9	177,224.0	206,206.5	216,339.0

1/ Excludes Alaska and Hawaii.
2/ Uses 1971 population figures.
3/ Uses 1977 population figures.
Source: (16).

Table 3—Population living in agricultural counties as a percent of total population

Census division	Population in agricultural counties			
	1950 1/	1959	1969-77 2/	1975-77 3/
	Percent			
New England	2.6	1.1	0.2	4/
Middle Atlantic	2.4	.1	0.0	0.0
East North Central	17.0	5.9	2.9	3.6
West North Central	53.4	31.7	23.7	16.0
South Atlantic	26.4	13.1	4.1	2.8
East South Central	47.2	24.4	9.8	5.0
West South Central	40.1	19.0	7.2	4.6
Mountain	33.3	16.8	8.7	5.1
Pacific	17.4	9.1	2.9	2.9
U.S. Total	23.0	11.0	5.2	3.8

1/ Excludes Alaska and Hawaii.
2/ Uses 1971 population figures.
3/ Uses 1977 population figures.
4/ Less than 0.05 percent.
Source: (16).

Farm-loss--Like the transitional counties, the farm-loss counties were not agricultural in 1975-77 but were agricultural in earlier periods. The 128 farm-loss counties had negative farm LPI in 1975, 1976, or 1977, or they had an extremely low ratio of farm LPI to farm proprietors and farmworkers. Apparently they experienced adverse weather or other problems in 1975-77. These counties may still be dependent on agriculture and may have a higher portion of LPI from farming in the future.

Formerly agricultural--Counties in the formerly agricultural group were agricultural in 1950 and/or 1959, but not in later periods. This group contained 1,039 counties.

Nonagricultural --Most of the 1,135 counties in the nonagricultural group never were agricultural in the periods considered. Twenty-eight counties were exceptions, being agricultural sporadically in the first and last time periods, every other time period, or in 1969-71 only.

The consistently agricultural counties were concentrated in the West North Central Division and nearby areas in Montana, Colorado, Texas, Oklahoma, New Mexico, Illinois, and eastern Wisconsin (figure 5). Other small concentrations were in central Kentucky, Arkansas, North Carolina, southern Georgia, Mississippi, southern Idaho, and eastern Washington. Transitional counties were generally found where there were concentrations of consistently agricultural counties. Of the 128 farm-loss counties, only about 30 were east of the Mississippi River. About 60 were in Texas, Kansas, and Nebraska. Formerly agricultural counties were spread throughout the country, particularly in the Mountain, Southern and East North Central Divisions. Nonagricultural counties were generally in the same areas that were not agricultural in 1950 (see figure 1).

Overshadowed--Finally, it is possible for a county to have a large farming sector and still have less than 20 percent of its LPI from farming. Agriculture in these counties may be important in absolute terms, but farm income is overshadowed by income provided by other businesses. Such counties were identified by ranking all counties by total farm LPI in 1975-77. Any county ranking in the top quintile of counties but having less than 20 percent of total LPI from farming was placed in the overshadowed group. This group had 374 counties.

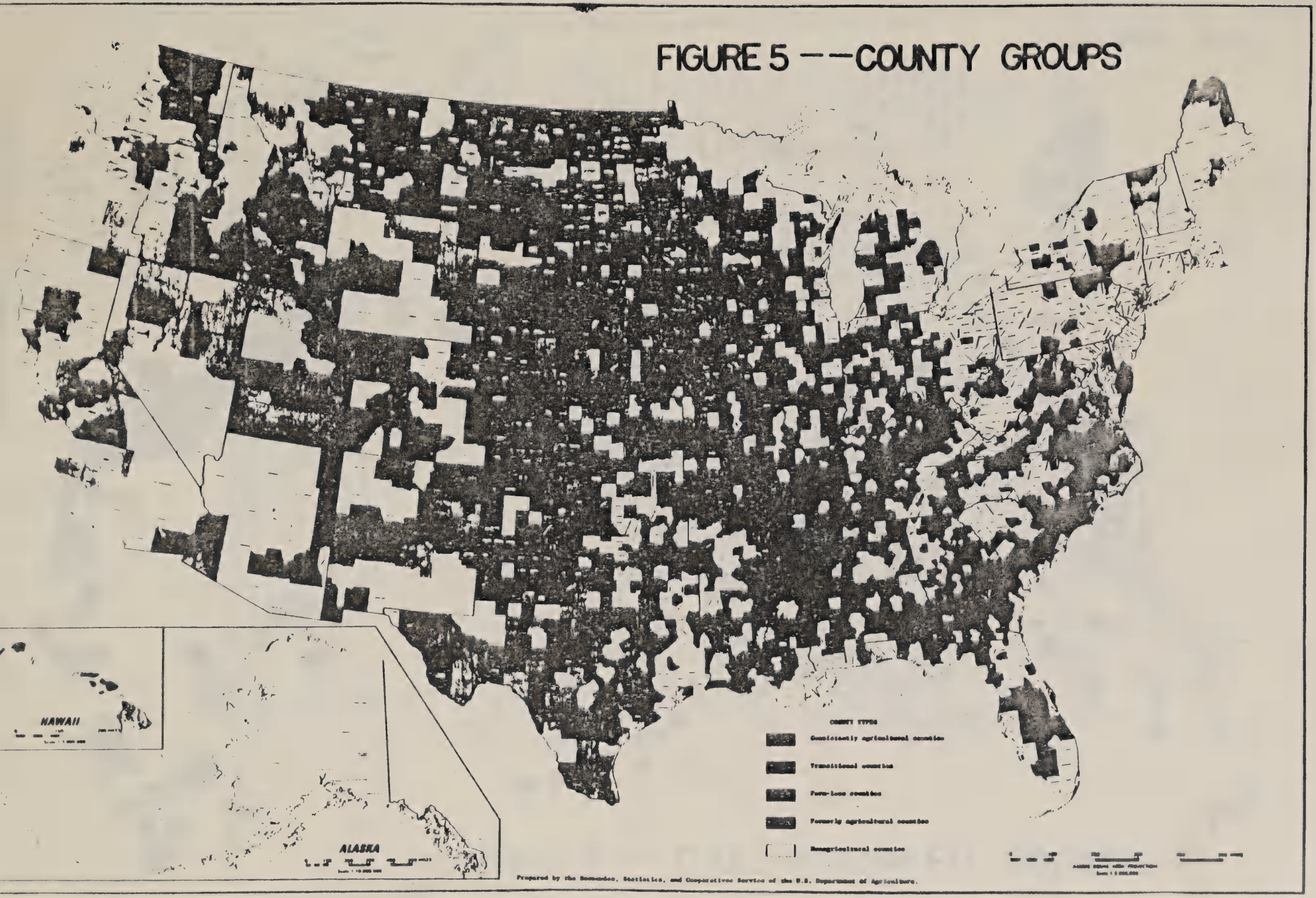
A county can be in only one of the first five groups (consistently agricultural through nonagricultural). These groups represent historical patterns, and a county can fit only one of the patterns. Each overshadowed county, however, also belongs to one of the historical groups. The overshadowed group simply identifies counties with large farm LPI in 1975-77 but a low portion of LPI from farming, regardless of the counties' history of dependence on agriculture.7/

Note that all of Hawaii was in the overshadowed group (figure 6). Other major concentrations of these counties were in:

(1) California and southern Arizona;
(2) Washington and Oregon;
(3) A belt from Minnesota and Iowa to Ohio;
(4) Eastern North Carolina;
(5) Southern Florida;
(6) And the Pennsylvania-Maryland border and Delaware.

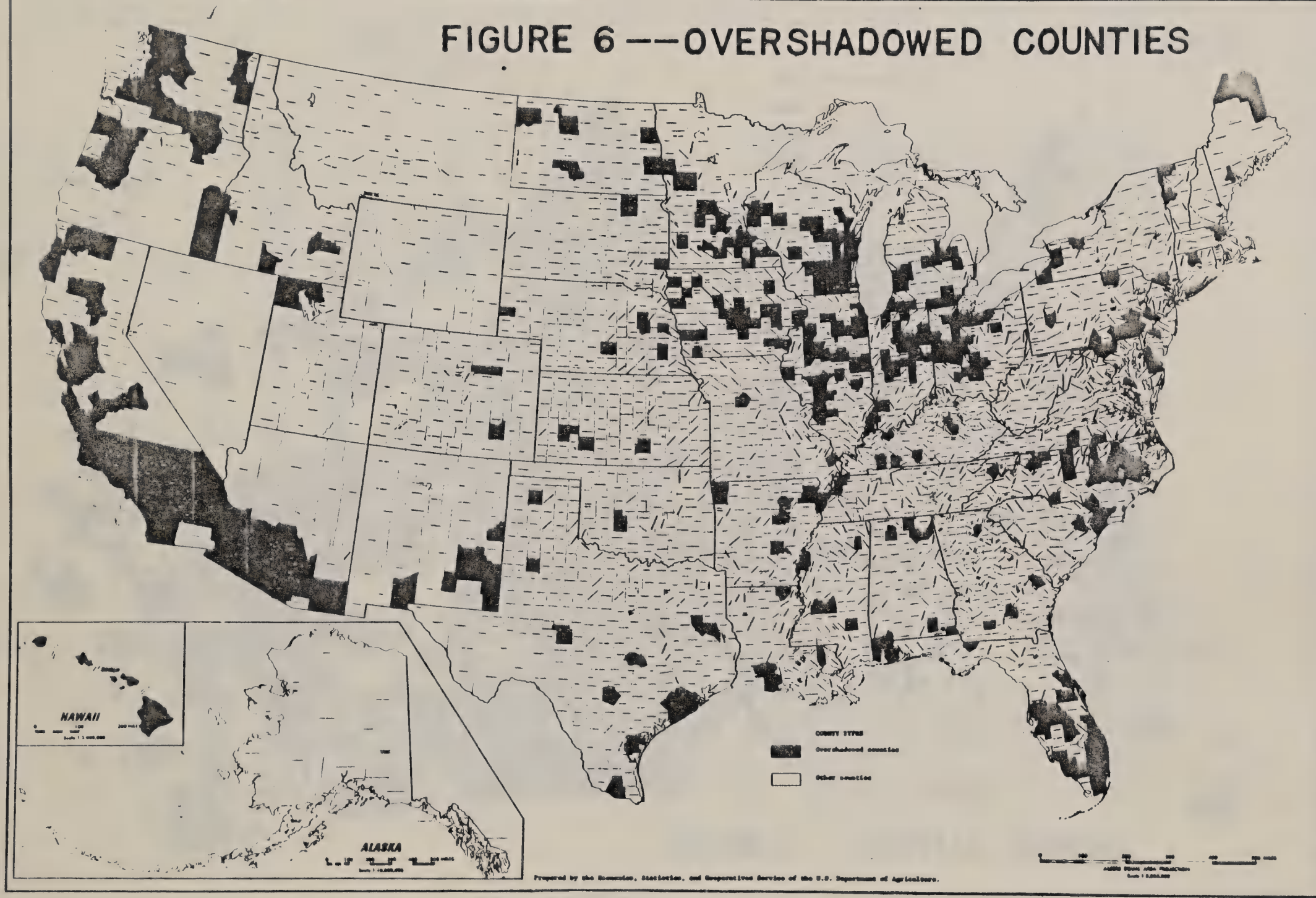
7/ Only 26 overshadowed counties also belonged to the transitional group. The formerly agricultural group had 184 overshadowed counties, and the nonagricultural group had 164.

FIGURE 5 --COUNTY GROUPS



Prepared by the Economics, Statistics, and Cooperatives Service of the U.S. Department of Agriculture.

FIGURE 6 --OVERSHADOWED COUNTIES



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AGRICULTURE TODAY

The 1974 Census of Agriculture was used to examine differences in farm characterstics among the county groups delineated above. 8/ Farm size, products produced, and farm operator characteristics vary substantially among the six groups.

Farm Numbers and Size

Only 23.0 percent of all U.S. farms were in consistently agricultural counties, compared with 30.2 percent in nonagricultural counties and 37.4 percent in formerly agricultural counties (table 4). Consistently agricultural counties, however, had 30.6 percent of the land in farms, while nonagricultural counties had only 24.8 percent, and formerly agricultural counties had 31.1. Consistently agricultural counties may have had fewer farms, but they were larger. The U.S. average farm size was 440 acres in 1974. Average farm size was greater than the national average in the consistently agricultural, transitional, and farm-loss groups, and lower than the national average in the remaining groups (table 4).

The farm-loss group had the largest average farm size, while the overshadowed had the smallest. Many of the farm-loss counties were in the Great Plains, where large farms and ranches were common. For instance, almost half of the group's counties were in Texas, Kansas, and Nebraska, where the average farm in a farm-loss county had 1,085 acres, 783 acres, and 1,223 acres, respectively. Average farm size in the overshadowed group was lowered by relatively small farms in the East North Central States, the New England States, the Middle Atlantic States, most of the Southern States, Minnesota, Iowa, and Oregon.

Considerable variation occurred in the average value of land and buildings per acre and per farm. Generally speaking, groups with a large average farm size had a low average value per acre (table 4). Farm size and average value per farm, however, were not as closely related. Farm size in the consistently agricultural counties was almost double that in the overshadowed counties, but the two groups had nearly identical values of land and buildings per farm. Although farms in the overshadowed counties were small, their average value per acre was high enough to result in the second highest value per farm.

Value of farm sales is a frequently used measure of size of business and is often used as an indicator of economic concentration in the farm sector. Farms in the consistently agricultural group had the highest median sales per farm and were more likely to have sales over $40,000 than the farms in other groups (table 4). The formerly agricultural and consistently agricultural counties together had almost two-thirds of farm product sales in the Nation.

Types of Products

The mix of crops varied among groups (table 4). For instance, corn was the most commonly harvested crop in all groups except the farm-loss and consistently agricultural counties, where wheat was the most common. The second most common crop was corn in the consistently agricultural group, soybeans in the overshadowed group, and hay in the remaining groups. The third largest crop was hay in the

8/ For more detailed information from both the 1969 and 1974 Censuses of Agriculture, see Appendix B. Results from the 1978 Census of Agriculture were not available when this report was prepared.

Table 4--Profile of farms by group, 1974

Item	Group					
	Consistently agricultural	Transitional	Farm-loss	Formerly agricultural	Nonagricultural	Over-shadowed
Number of counties	673	163	128	1,039	1,135	374
Number of farms	531,561	138,189	80,049	865,303	698,735	518,555
Percent of all U.S. farms	23.0	6.0	3.5	37.4	30.2	22.4
Percent of all U.S. land in farms	30.6	7.4	6.2	31.1	24.8	15.1
Average farm size (acres)	585	542	783	365	361	296
Average value of land and buildings:						
Per acre (dollars)	303	281	208	355	402	580
Per farm (dollars)	177,186	152,294	162,591	129,882	145,158	171,588
Percent of farms with sales of:						
$100,000 or more	9.4	7.9	6.1	5.6	5.6	8.9
$40,000 to $99,999	20.6	18.0	12.6	11.5	11.5	17.1
$2,500 to $39,999	55.4	54.6	54.5	50.6	47.8	52.9
less than $2,500	14.5	19.5	26.8	32.3	35.0	21.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percent of all U.S. farms with sales of $40,000 or more	33.4	7.5	3.1	30.9	25.1	28.2
Median value of sales per farm (dollars)	19,700	15,600	8,800	6,900	6,300	14,600
Percent of all U.S. farm products sales	31.8	7.2	3.3	32.0	25.8	28.2
Most commonly harvested crops (average acres per farm in parentheses)						
First	Wheat (63)	Corn (45)	Wheat (46)	Corn (23)	Corn (24)	Corn (39)
Second	Corn (51)	Hay (32)	Hay (34)	Hay (20)	Hay (22)	Soybn (25)
Third	Hay (31)	Wheat (28)	Corn (25)	Soybn (19)	Soybn (15)	Hay (18)
Fourth	Soybn (30)	Soybn (28)	Cotton (20)	Wheat (14)	Wheat (14)	Wheat (16)
Percent of average farm in top four crops 1/:	29.9	24.5	16.0	20.8	20.8	33.1

Table 4--Profile of farms by group, 1974--continued.

Item	Group					
	Consistently agricultural	Transitional	Farm-loss	Formerly agricultural	Nonagricultural	Over-shadowed
Most commonly sold livestock (average head per farm in parentheses):						
First	Hogs (56)	Hogs (64)	Cattle (48)	Hogs (28)	Cattle (22)	Hogs (39)
Second	Cattle (46)	Cattle (40)	Hogs (30)	Cattle (24)	Hogs (21)	Cattle (26)
Percent of farm operators by principal occupation 2/						
Farming	77.7	72.4	66.9	58.4	54.0	65.5
Other occupation	22.3	27.6	33.1	41.6	46.0	34.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percent of farm operators reporting 200 or more days off-farm work 2/	23.0	27.7	30.4	39.0	42.7	35.1
Full owners as a percentage of total farm operators	52.4	57.4	56.9	65.5	64.9	60.3
Percent of farm operators: 2/						
Under 35 years old	14.4	13.9	13.7	12.4	11.8	13.2
Between 35 and 64 years old	69.0	68.5	66.4	68.3	69.2	70.4
65 years old or older	16.6	17.5	19.9	19.3	19.0	16.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Median age of farm operators (years)	52.1	52.3	53.3	53.1	52.9	52.0
Black and other race operators as a percent of total operators	1.9	3.0	2.9	3.3	2.0	2.8
Percent of U.S. total black and other race operators	17.0	7.0	3.9	48.2	24.0	24.3
ASCS Payments in 1979 (million dollars)	593.1	103.8	114.8	349.6	238.8	242.1

Table 4--Profile of farms by group, 1974--continued

Item	Group					
	Consistently agricultural	Transitional	Farm-loss	Formerly agricultural	Nonagricultural	Over-shadowed
Percent of U.S. total ASCS payments received in 1979	42.2	7.4	8.2	25.0	17.1	17.3
Average ASCS payment in 1979 (dollars) 3/	1,522	1,230	2,112	998	949	1,182

1/ Calculated by dividing sum of average acres in four most common crops by average farm size.
2/ Data apply only to proprietorships and partnerships.
3/ Calculated by dividing ASCS payments by farmers receiving ASCS payments.
Source: (11, 12).

consistently agricultural and overshadowed groups, soybeans in the fomerly agricultural and nonagricultural groups, corn in the farm-loss group, and wheat in the transitional group.

The consistently agricultural and overshadowed counties appeared to be more specialized than the other groups. The two groups had 29.9 and 33.1 percent, respectively, of their average farm acreage in the top four crops (table 4). The comparable percentages for the remaining groups were considerably less.

Grain production was concentrated in the consistently agricultural counties, which had a larger percentage of the total harvested acreage of corn, sorghum, wheat, and small grains than any other group. Since many of its counties were in the relatively dry Great Plains, the consistently agricultural group had over half the wheat, almost half the other small grains, and over two-fifths of the sorghum. The formerly agricultural counties had the largest share of soybeans, peanuts, cotton, tobacco, and hay. Many of these counties were in the South, which explains why the group had about half the peanuts and tobacco and almost two-fifths of the cotton. The overshadowed group had more than half the acres in vegetables and orchards. Over 80 percent of the group's orchard acreage was in California, Florida, and Washington, and over 70 percent of its vegetable acreage was in California, Florida, Oregon, Washington, and Wisconsin.

All groups except the farm-loss and nonagricultural sold more hogs than cattle (table 4). The consistently agricultural group had more than one-third of the Nation's cattle and hog sales; no other group sold as many hogs and cattle. 9/ More than half of the consistently agricultural group's cattle sales were from farms in Colorado, Iowa, Kansas, Nebraska, and Texas. Farms in Iowa, Illinois, Nebraska, and Minnesota sold over 60 percent of the group's hogs.

Farm Operators

The discussion of agriculture so far has centered on characteristics of the farm as a business, stressing its size, sales, and production. Personal characteristics of the farm operators, such as their off-farm work, age, and race, will be examined next.

Off-farm Work--Over 70 percent of the farmers in the consistently agricultural and transitional groups reported farming as their principal occupation (table 4). 10/ At the other extreme, only 54.0 percent of the farmers in the nonagricultural counties reported farming as their principal occupation. A strong relationship between farm size and principal occupation is not apparent. The farm-loss group had the largest average farm size, but it had a smaller percentage of farmers reporting farming as their principal occupation than the consistently agricultural or transitional groups. The farm-loss group's percentage, in fact, was practically identical to that of the overshadowed group, which had the smallest average farm size. The portion of farmers claiming farming as their major occupation appears to be more closely related to gross sales. Groups with larger portions of their farms selling under $2,500 of products tended to have more farmers with a nonfarm principal occupation.

9/ Relatively few sheep were sold in any group. Poultry were not considered in the analysis.

10/ A farmer's principal occupation occupies at least 50 percent of his work time (10).

Tenure--Over 60 percent of the farmers in the formerly agricultural, nonagricultural, and overshadowed groups were full owners or owned all the land they farmed, compared with 52.4 to 57.4 percent of the farmers in the other groups (table 4).

Almost half of the farmers in the consistently agricultural counties rented land in 1974, compared with slightly more than one-third of farmers in the formerly agricultural and nonagricultural counties. Renting, in addition to owning, allowed farmers to operate large farms without buying additional land.

Age--There were few differences in the age distribution of farm operators among the county groups (table 4). The consistently agricultural counties had a slightly larger percentage of young operators under 35 years old than any other group. The farm-loss, formerly agricultural, and nonagricultural counties had a larger concentration of farmers 65 years old or older.

Race--American farmers were overwhelmingly White in 1974. Even in the formerly agricultural counties, which had 48.2 percent of the Nation's Black and Other Race farm operators, only 3.3 percent of the farmers were not White. These Black and Other Race farm operators tended to be Blacks living in the South. The Blacks and Other Races in overshadowed counties, however, were more likely to be Asians or Pacific Islanders. About 38 percent of the overshadowed group's Black and Other Race operators lived in California or Hawaii and were overwhelmingly Asians or Pacific Islanders, rather than Black. The other groups' portion of Black and Other Race operators living in Hawaii or California ranged from none in the farm-loss group to 15 percent in the nonnagricultural group.

Farm Programs and Rural America

Agricultural Stabilization and Conservation Service (ASCS) data from calendar year 1979 are used to show the magnitude of farm program payments throughout the Nation (12). 11/ These data include cash payments for all ASCS programs, including wheat, feed grains, rice, cotton, sugar, and conservation. Commodity Credit Corporation loans, however, are excluded from the data.

Farmers in consistently agricultural counties received over two-fifths of all program payments in 1979 (table 4). The concentration of program payments in the consistently agricultural counties reflects that farms in this group were larger than the national average and produced a large portion of the Nation's farm products covered by ASCS programs. The formerly agricultural counties, in contrast, had more farms, but received only one-quarter of total ASCS payments.

The average ASCS payment nationally was $1,238 in 1979. The consistently agricultural and farm-loss counties had ASCS payments per farmer above the U.S. average, while the transitional counties' payments per farmer were slightly below average. The other groups had smaller payments per farmer than the national average. Groups with larger than average farms tended to have larger than average ASCS payments.

Farm program payments undoubtedly have a beneficial effect on rural areas by stabilizing farm income when prices are low or natural disasters reduce yields. However, payments for farm programs are a minor component of LPI even in the consistently agricultural counties. The $600 million ASCS payment received in the consistently agricultural counties in 1979 was slightly more than 2 percent of the groups' average annual LPI in the 1975-77 period. Other sources of income were considerably

11/ The most current total ASCS payments data available for individual counties are from 1979. See Appendix C for more detailed data.

larger. For instance, the total annual fringe benefits received by wage earners in consistently agricultural counties averaged $1.3 billion between 1975 and 1977. 12/ This was double the ASCS payments made to farmers in the same counties in 1979. During the 1975-77 period, annual transfer payments in these counties averaged $6.4 billion, or more than 10 times the 1979 ASCS payments.

AGRICULTURE IN RURAL ECONOMIES

So far, this report has stressed agriculture by identifying groups of counties dependent on farming in different years and describing the groups' farm characteristics. Nonagricultural businesses, however, are also important. Employment and income data are used here to examine both the agricultural and nonagricultural sectors of each group. 13/

Sources of Income and Employment

The more agriculturally dependent groups (consistently agricultural, transitional, and farm-loss) had a much higher portion of their employment in farming than the other groups in 1975-77 (table 5).14, 15/ On the other hand, the formerly agricultural, nonagricultural, and overshadowed groups had larger portions of total jobs in services, retail, and manufacturing.

LPI from farming was the largest source of personal income only in the consistently agricultural counties (table 5). The transitional and farm-loss groups' relatively small portions of income provided by farm proprietors probably were due to unusual local conditions. 16/ The farm-loss group contained counties experiencing negative LPI in 1975, 1976, or 1977, or extremely low LPI per farm proprietor and farm worker ratios. Farm proprietors' income in these counties was 77.1 percent lower in 1975-77 than it was in 1969-71. One would expect many of these counties to have more than 20 percent of their LPI from farming when local agriculture recovers. The attempt to isolate all counties experiencing unusual farming conditions in the farm-loss group was not entirely successful. The transitional group had a 5.2-percent decrease in farm proprietors' income between 1969-71 and 1975-77. Farming was a minor source of income in the formerly agricultural, nonagricultural, and overshadowed counties.

Transfer payments and property income (dividends, interest, and rent) were an important source of income, even in the consistently agricultural counties (table 5). Each source supplied nearly one-fifth of the farm-loss group's personal income.

12/ BEA calls fringe benefits "other labor income.". Other labor income consists largely of employer contributions to private pension and welfare programs.
13/ See Appendix A for a detailed description of the BEA data used in this section. Appendix A also contains tables of detailed employment and income data.
14/ Three-year averages of employment and income data are used.
15/ The employment data actually provide a count of jobs, not employed persons (2). People employed at more than one location are counted at each establishment. A person operating a farm is classified as a farm proprietor even if he/she is employed off-farm, but a nonfarm proprietor is counted as a proprietor only if he/she spends more than half the work week at the proprietorship (15).
16/ Drought was widespread in 1976 and 1977 (18).

Table 5 --An economic profile of the county groups, 1975-1977.1/

Item	Group					
	Consistently agricultural	Transitional	Farm-loss	Formerly agricultural	Non-agricultural	Over-shadowed
Percent of total employment in farming:						
Farm proprietors	19.9	16.5	22.5	9.2	1.1	2.1
Farm laborers	9.3	6.5	7.7	4.2	.6	1.8
Total	29.2	23.0	30.1	13.4	1.7	3.9
Largest sources of wage and salary employment (percent of total employment in parentheses): 2/						
First	Gov. (17.6)	Gov. (16.5)	Gov. (16.2)	Gov. (19.0)	Gov. (18.7)	Gov. (18.5)
Second	Ser. (10.1)	Ser. (12.1)	Ser. (10.6)	Ser. (13.0)	Ser. (18.2)	Ser. (17.3)
Third	Ret. (9.9)	Ret. (11.1)	Ret. (9.3)	Ret. (12.1)	Ret. (14.5)	Ret. (14.8)
Fourth	Farm (9.3)	N.m. (7.9)	Farm (7.7)	N.m. (9.7)	D.m. (12.5)	D.m. (12.9)
Fifth	N.m. (5.4)	Farm (6.5)	N.m. (5.5)	D.m. (9.2)	N.m. (8.2)	N.m. (7.3)
Farm LPI as a percent of total personal income	20.1	10.1	5.2	5.6	.6	2.2
Largest sources of personal income (percent of total personal income in parentheses): 2/						
First	Farm (20.1)	Prp. (16.4)	Prp. (19.2)	Trn. (15.8)	Gov. (13.8)	Prp. (13.8)
Second	Prp. (16.3)	Trn. (16.0)	Trn. (19.0)	Prp. (13.6)	Trn. (13.7)	Trn. (13.6)
Third	Trn. (15.4)	Gov. (10.6)	Gov. (10.5)	Gov. (12.5)	Ser. (13.5)	D.m. (13.3)
Fourth	Gov. (10.0)	Farm (10.1)	Ser. (6.8)	D.m. (8.4)	D.m. (13.5)	Gov. (13.3)
Fifth	Ret. (6.0)	Ser. (7.9)	Ret. (6.8)	Ser. (8.2)	Prp. (13.5)	Ser. (12.7)
Per capita personal income	5,381	4,936	4,259	5,211	6,727	6,707

1/ Three-year averages of employment and income data were used.
2/ Abbreviations used: Gov-Government; Ser.-Services; Ret.-Retail trade; N.m.-Nondurables manufacturing; D.m.-Durables manufacturing; Prp.-Property income; Trn. -Transfer payments.
Source: (16)

At the other extreme, the nonagricultural and overshadowed counties only received between 13 and 14 percent of their income from each of these sources.

Per capita personal income was substantially lower in the more agricultural groups (consistently agricultural, farm loss, and transitional counties) than in the nonagricultural or overshadowed counties. However, having a large portion of personal income from agriculture doesn't necessarily result in a low per capita income. The consistently agricultural group had a slightly larger per capita income in 1975-77 than the formerly agricultural group (table 5).

Growth

Examining the transitional group's growth rates may give insight as to how counties become less dependent on agriculture. Between 1969-1971 and 1975-1977, the fastest growing wage and salary employment and income were in the transitional group (table 6). The group's growth was general rather than concentrated in one or two sectors. The transitional counties had high employment and LPI growth rates relative to other groups in most of the nonagricultural industries shown.17/

Higher population density may explain why the transitional counties had higher growth rates in the trade and service sectors than the consistently agricultural and farm-loss counties. The transitional group averaged 15,300 people per county in 1975-77, compared with 11,800 in the consistently agricultural group and only 8,700 in the farm-loss group. Trade and service firms in the consistently agricultural and farm-loss counties may have had difficulties reaching households and businesses scattered in many small towns and in the open country. Expansion would have been easier in areas where customers were more concentrated.

No simple relationship exists between population growth and wage and salary employment. Although the transitional group had the highest rate of growth in wage and salary employment, the formerly agricultural and overshadowed counties had higher population growth rates. The transitional counties, however, had a much higher portion of jobs provided by farm proprietorships (table 5). Heavily specializing in a declining source of employment such as farming apparently dampens population growth. The consistently agricultural and farm-loss groups had moderate wage and salary employment growth, but both groups had a low, 4-percent population growth. These counties had an even higher portion of farm proprietorships than the transitional counties.

Unusually low income from farming in 1975-77 also contributed to the decline in agricultural counties. Although the consistently agricultural and transitional groups lost farm proprietors at about the same rate, the transitional group's farm proprietors' income (FPI) fell 5.2 percent between 1969-71 and 1975-77, compared with an increase of 58.7 percent in the other group. Decreases in FPI were common

17/ Growth rates for specific industries may be misleading, since an industry that was rather small in 1969-71 may have a large growth rate even though the actual change in employment or income is small. The problem is particularly severe in small groups like the transitional and farm-loss counties which had only 623.1 thousand and 247.8 thousand wage and salary jobs, respectively, in 1969-71 (table 6). To avoid astronomical growth rates, rates are not presented if the industry provided fewer than 15,000 jobs or less than $50 million in income in a group in 1969-71. Examining changes over time is also hindered by recent changes in the definitions of certain industries (17). Wholesale and retail trade had to be combined in table 6 due to drastic definition changes in the trade sectors.

Table 6--Selected growth rates in each group between 1969-71 and 1975-77 1/

Item	Group					
	Consistently agricultural	Transitional	Farm-loss	Formerly agricultural	Non-agricultural	Over-shadowed
Wage and salary employment (thousand jobs):						
1969-1971	1,920.3	623.1	247.8	8,151.1	67,336.4	24,373.0
1975-1977	2,257.4	756.8	287.7	9,720.1	73,063.8	27,537.9
Percent change	17.6	21.5	16.1	19.2	8.5	13.0
Wage and salary income (million dollars):						
1969-1971	8,785.2	2,845.0	1,033.6	43,475.5	483,659.2	172,839.9
1975-1977	15,902.1	5,563.4	1,961.9	79,577.1	783,519.7	287,881.0
Percent change	81.0	95.6	89.8	83.0	62.0	66.6
Percent change in wage and salary employment in specific industries:						
Farming	13.9	2.5	-3.2	2.8	5.8	11.2
Construction	15.0	48.4	2/	21.4	-.5	1.7
Nondurables manufacturing	14.4	18.3	16.3	11.5	-6.0	2.1
Durables manufacturing	25.0	35.5	2/	17.6	-3.5	1.3
Transportation, communication, and public utilities	11.3	12.6	11.3	15.7	1.4	5.4
Trade (wholesale and retail)	21.4	28.9	17.0	29.5	15.6	20.7
Services	19.5	23.3	15.0	21.8	20.8	24.2
Government	12.6	13.7	12.9	15.2	8.9	11.2
Percent change in farm proprietors	-8.5	-9.4	-9.3	-8.6	-8.9	-8.6

Continued

Table 6--Selected growth rates in each group between 1969-71 and 1975-77 1/--Continued

Item	Group					
	Consistently agricultural	Transitional	Farm-loss	Formerly agricultural	Non-agricultural	Over-shadowed
Percent change in LPI in specific industries:						
Farming	61.9	7.3	-52.9	54.7	50.9	77.7
Construction	73.9	133.6	143.0	81.9	48.0	48.7
Nondurables manufacturing	78.6	88.1	83.8	76.4	47.6	57.6
Durables manufacturing	102.1	123.6	119.0	88.3	55.2	58.6
Transportation, communication, and public utilities	81.6	81.4	86.5	91.7	68.8	72.6
Trade (wholesale and retail)	72.8	81.4	70.3	82.0	63.9	70.4
Services	72.5	96.2	77.8	84.8	77.5	81.5
Government	73.9	78.9	76.0	76.5	68.3	71.1
Percent change in farm proprietors' income	58.7	-5.2	-77.1	50.4	44.9	77.8
Population (thousand):						
1969-71	7,605.2	2,348.6	1,072.6	27,228.6	165,512.8	63,192.8
1975-77	7,911.4	2,491.2	1,115.2	30,171.1	172,970.9	67,787.5
Percent change	4.0	6.1	4.0	10.8	4.5	7.3

1/ Three-year averages of data were used.
2/ Calculated on a base of less than 15,000 workers or less than $50 million.
Source: (16).

in the transitional counties; 88 counties in 22 States had smaller FPI in 1975-77 than in 1969-71 (table 7). Iowa, Kansas, Georgia, and Idaho together had almost half of the counties with a negative change in FPI. Farm LPI will undoubtedly be a larger share of total LPI in the transitional counties if agriculture recovers.

One should not, however, expect a large portion of the transitional counties to become agricultural again in the future if the rapid growth of their nonagricultural sector continues. Even counties with decreases in FPI experienced rapid growth in the nonfarm sector (table 7). For instance, of the 88 counties with a decrease in FPI, 35 had wage and salary income growth rates at least equal to the average for the transitional group (95.6 percent), and another 36 had rates at least equal to the national average (64.2 percent). Farm income would have to recover and increase dramatically to raise the portion of LPI from farming to 20 percent again.

AGRICULTURE AS A STIMULUS

The personal income and employment data for farming do not fully reflect the importance of agriculture in rural areas. Local businesses are interdependent; a decision by a businessperson also affects his/her suppliers (4). For instance, a cheese manufacturer increases its sales to a distant city and requires more milk from local dairy farmers. The dairy farmers, in turn, must buy supplies from local merchants in order to produce more milk. The additional supplies bought by the dairy farmers are bought by the merchants from wholesalers outside the local area. Both the cheese manufacturer and merchants have employees, and the employees use some of their wages to buy consumer goods from local merchants. The chain reaction of local sales resulting from the cheese sales is abbreviated for presentation purposes. The manufacturing firm, farmers, merchants, and workers all buy a variety of goods and services, and each purchase stimulates a chain of additional purchases.

Note that the chain reaction was initiated by an "export," the sale of cheese in a distant city. In this context, exports are sales to firms or individuals from outside the local area. Every small area is economically specialized, because no locality can produce all the goods and services its residents need (4). Small areas export so that they can earn money to purchase items not produced locally.

The chain reaction of local sales that result from an increase in exports is summarized by export multipliers. Each multiplier shows how much total local sales increase in response to a $1-dollar export increase by a particular type of business (4).18/ Multipliers are presented here in terms of sales. They could, however, have been expressed as the family income or jobs resulting from an export expansion.

An industry that purchases a large portion of its inputs locally generally has a large multiplier (1). When little money leaks from the local economy through nonlocal purchases, a stronger stimulus is sent to other local firms. Farming and its associated processing industries frequently have high multipliers because they tend to purchase inputs locally. To show how agriculture compares to other industries, the multipliers produced by three input-output models will be examined.19/

18/ Technically speaking, export multipliers can be applied to any change in final demand, which may include capital formation, inventory change, government purchases, and consumption expenditures as well as exports (3). This report emphasizes exports because of their importance to small, specialized economies.

19/ Caution should be exercised when comparing multipliers from different models. Model builders use different assumptions, and assumptions can affect multiplier size.

TABLE 7—Changes in farm proprietors' income and wage and salary income in transitional counties by State, 1969-71 to 1975-77

State	Transitional counties				
		With negative changes in farm proprietor's income			
			With change in wage and salary income 1/		
	Total	Total	At least 95.6 percent	At least 64.2 percent but less than 95.6	Less than 64.2 percent
			Number		
Alabama	5	2	0	1	1
Arizona	1	0	0	0	0
Arkansas	2	1	0	1	0
Colorado	2	1	0	1	0
Florida	2	2	1	1	0
Georgia	13	8	4	3	1
Hawaii	1	0	0	0	0
Idaho	10	8	7	1	0
Illinois	2	0	0	0	0
Iowa	27	17	5	10	2
Kansas	14	9	2	5	2
Kentucky	9	0	0	0	0
Lousiana	5	3	0	1	2
Minnesota	4	3	2	1	0
Mississippi	11	4	0	2	2
Missouri	6	3	0	1	2
Montana	3	3	1	2	0
Nebraska	5	4	3	1	0
North Carolina	2	0	0	0	0
North Dakota	2	0	0	0	0
Oklahoma	2	2	2	0	0
Oregon	2	2	1	0	1
South Carolina	2	0	0	0	0
South Dakota	5	4	2	2	0
Tennessee	2	1	1	0	0
Texas	9	4	0	2	2
Utah	2	2	1	0	1
Vermont	1	0	0	0	0
Virginia	2	0	0	0	0
Washington	1	0	0	0	0
Wisconsin	5	1	1	0	0
Wyoming	4	4	2	1	1
Total	163	88	35	36	17

1/ Average growth in wage and salary income was 95.6 percent in the transitional group and 64.2 percent for the Nation.
Source: (16).

The University of Idaho built a 1974 input-output model of the Wendell-Jerome area of Idaho (7). Both towns were located in consistently agricultural counties. The highest multiplier was 2.005 for professional services, and the next highest were 1.873 and 1.869 for large and small farms, respectively. Farm products and raw materials also had a relatively high multiplier of 1.834.

In a 1977 study, BEA used the national input-output model to estimate multipliers for each BEA Economic Area in the U.S. United States (13). The Sioux Falls Economic Area, which includes parts of South Dakota, Minnesota, and Iowa, contained 2 nonagricultural counties, 2 formerly agricultural counties, 1 transitional, and 20 consistently agricultural counties. Farming and agricultural processing industries in the Sioux Falls Economic Area frequently had higher multipliers than other industries. Multipliers for the farming and agricultural services industries ranged from 1.778 for grain farming to 2.404 for forest, greenhouse, and nursery products, and six of the eight multipliers were greater than 2.000. Agricultural processing multipliers ranged from 1.620 for miscellaneous food products to 2.491 for meat processing. Five of the 10 agricultural processing multipliers were greater than 2.000. Nonagricultural manufacturing industries had multipliers ranging from 1.481 to 2.219, but only 1 of the 15 multipliers was greater than 2.000. The seven remaining industries' multipliers ranged from 1.509 to 2.020; only the two trade and service multipliers were greater than 2.000.

The University of Minnesota prepared a 1972 input-output model of Kandiyohi, McLeod, Meeker, and Renville counties in Minnesota (3). Meeker and Renville were consistently agricultural counties while Kandiyohi and McLeod were formerly agricultural counties. Agricultural multipliers ranged from 1.744 to 2.521. Crop farming, livestock farming, dairy products manufacturing, and grain elevators had multipliers over 2.000 while agricultural services and other agricultural products processing had multipliers between 1.700 and 1.800. Nonagricultural multipliers ranged from 1.415 to 2.425, and 6 of the 11 multipliers were greater than 2.000.

These input-output models show that increased sales by farmers and related agricultural businesses can have a large impact on the rest of the local economy. Multipliers, however, may overstate agriculture's ability to provide the stimulus for economic growth.

Multipliers work as well in reverse as in forward. A severe drought in an area heavily dependent upon farming could have adverse effects on the whole local economy. A more diversified economy provides a cushion against droughts and low prices that periodically vex farmers. Similarly, a prosperous farm sector can protect a local economy against recessions in other industries.

Whenever multipliers are discussed, the probable size of the increase in exports must also be considered. A large increase in exports by an industry with a small multiplier may be more effective in stimulating local sales than a small increase in exports by an industry with a large multiplier. A $500,000-export increase in an industry with a 1.5 multiplier results in a $750,000 increase in total sales, but a $100,000 increase in an industry with a 2.5 multiplier results in only $250,000 additional local sales. Agriculture's large multipliers cannot have a large impact on local areas if the farm sector cannot produce large sales increases in real terms.

Several factors work against large and continuous increases in local farm product sales. The Nation's acreage of good cropland is limited. A 1975 study identified 78 million acres of land not used for crops that had high potential for conversion to crop production, given the cost-price relationships favorable to farmers in 1974 (6). Of that 78 million acres, only 15 million were prime land requiring no development and

having no major problems, such as erosion hazards. Another 9 million acres of potential prime crop land also had no major problems, but would require some development. Cultivating these 24 million acres would increase our prime land under cultivation by only 10 percent. In addition, most farm products have low income elasticities, and a large share of the expansion of domestic demand for farm products comes from population growth (8). Growth of foreign demand could provide new markets for American farm products. Foreign exports, however, fluctuate with the weather in other countries and with international politics. Given the limited supply of readily convertible potential farm land, farm products' low income elasticities, and the undependability of agricultural exports, an area may choose to specialize in businesses with a more steadily growing demand if rapid, but continued, growth is desired.

Finally, more must be considered than just growth in local sales. Although agricultural industries may be effective in stimulating local gross output, they may not be as effective in increasing personal income received by families and individuals. For instance, in the four-county Minnesota input-output model, an extra million dollars in exports by the dairy products manufacturing industry would increase local sales by $2,369,000, but a similar export increase in the nonagricultural manufacturing sector would increase local output by only $1,415,000 (3). Personal income generated by the two export increases, however, would be almost the same. The dairy plants would pay their own workers $52,000, and another $246,000 would be paid to households by firms reacting to the dairy plants' stimulus. In contrast, nonagricultural manufacturing would pay $197,000 directly to its own workers, and only $72,000 would be paid to households in response to the nonagricultural manufacturing stimulus. The total paid to households as a result of increased nonagricultural manufacturing exports would be $269,000, or only 10 percent less than the $298,000 resulting from an equal increase in dairy plant exports (3).

IMPLICATIONS

What implications can be drawn from these data? Obviously, interest in a 1981 farm bill will be highest in the consistently agricultural, transitional, and farm-loss counties where farming still provides a large portion of employment. Interest in the bill will also be enhanced by the fact that farm program payments are concentrated in those counties. More than $.8 billion, or over 50 percent, of the Nation's ASCS payments were paid to farmers in these counties in 1979. Farm program payments however, were a minor portion of total local income. For example, farm program payments were smaller than workers' fringe benefits in the consistently agricultural counties. Even after multiplier effects are considered, the impact of farm program payments on many rural economies is quite small.

The data also have longrun implications. The number of counties receiving at least 20 percent of their LPI from farming decreased from 2016 in 1950 to 684 in 1975-77. The common belief that there is a direct relationship between the health of farming and nearby communities is becoming more and more difficult to hold as nonagricultural sources of income and employment countinue to grow. Even in the consistently agricultural counties, over three-quarters of personal income came from sources other than farming, agricultural service, and food processing in 1975-77. We can no longer assume that addressing farmers' problems automatically provides a better living for all rural people. Industries other than farming can also be effective vehicles for rural development.

Growth in the nonfarm sector, however, will not be entirely disadvantageous to farmers. Nonfarm growth can provide more off-farm employment to supplement farm income and may reduce economic pressures to combine small farms into larger and

larger units. Growth in the nonfarm sector can also provide better employment opportunities for the majority of rural people who don't live on farms, including many farmers' children.

Farming will remain important as the nonfarm sector grows. Many counties will still have a large farm sector, even if farming no longer provides 20 percent of LPI. For instance, the overshadowed counties had only 15.1 percent of the land in farms in 1974, but they harvested 28 percent of the corn, 27 percent of the soybeans, 22 percent of the small grains other than wheat, 22 percent of the cotton, 39 percent of the tobacco, and 56 percent of the vegetables and melons.

A larger share of American farmers, however, will live in areas where farming and related agribusiness are overshadowed by other businesses. The attention of elected officials will be increasingly diverted from farm problems to topics of more interest to the general public. Farmers and other agribusiness people will need to find alliances with other local industries and nonfarm people to advance their interests.

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APPENDIX A
SOURCES AND LIMITATIONS OF BEA DATA

The estimating techniques used by the Bureau of Economic Analysis (BEA) should be discussed because the BEA's local area personal income and employment data were used extensively in this report. Most of the information presented below came from Local Area Personal Income 1973-78 (14) and Employment Data for Rural Development Research and Policy (2).

Definitions

Personal income is the current income of an area's inhabitants. It is measured before deduction of personal taxes, such as income taxes, but after personal deductions for contributions to social insurance programs, such as social security and government retirement. Personal income is composed of wages and salaries, other labor income, net income of proprietors of unincorporated businesses, transfer payments, and property income (dividends, interest, and rent).1/ Other labor income is largely employer contributions to private pension and welfare programs. Transfer payments are payments to people for which no work was done in the current time period. Examples of transfer payments are Social Security and welfare program benefits. Both rent and interest include estimates of nonmonetary receipts (14).

The labor and proprietors' income (LPI) for each industry is on a place-of-work basis, since the data is reported by establishment.2/ An adjustment is made to LPI to assign commuters' income to county of residence. Unlike the income data, the employment data is provided only on a place-of-work basis. BEA data actually provide a count of jobs, not a count of employed persons. People employed by more than on establishment are counted at each establishment (2).

Different definitions of farm and nonfarm proprietors are used in the employment data. A person operating a farm is classified as a farm proprietor even if he/she is also employed off-farm. Nonfarm proprietors are counted only if they spend more than half of their work week at the proprietorship (15).

Sources of Data

Most of the data used by the BEA in preparing its income estimates come from the administrative records of Federal and State agencies. Among the more important sources are: State Unemployment Insurance Programs; Internal Revenue Service; U.S. Social Security Administration; and Censuses of Population and Agriculture. These sources provide over 90 percent of the data necessary for preparing State and county income estimates (14).

The methods used to estimate farm proprietors and farm wage income should be mentioned, since agriculture is a major emphasis of this paper. Net farm propretors' income is derived by subtracting production expenses from gross farm income in each

1/ BEA documents use the term proprietors to mean both proprietors and partners who own unincorporated business.

2/ LPI is the sum of wages and salaries, other labor income, and proprietors' net income.

county. Estimates of gross farm income and expenses depend heavily upon data from the Census of Agriculture and intercensal State and county data provided by the Department of Agriculture. Income estimates are adjusted to exclude net income of corporate farms (14). The farm wage component of personal income is calculated from the USDA's estimate of farm wages paid in each State. State totals are allocated to the county level in proportion to each counties' share of farm wages reported in the Census of Agriculture (14).

The BEA's employment data are derived using procedures and sources similar to those used in estimating income. The number of farm proprietors is estimated from USDA and Census of Agriculture data and adjusted to exclude corporate and institutional farms (2).

Limitations of the Data

Although BEA income and employment estimates are carefully prepared, they are subject to error. The estimates are based on millions of administrative records. Errors may occur as agencies collect and process data from their programs. BEA has developed computerized edit programs to find major errors (14). Many less serious errors undoubtedly remain undetected. Some of the methods used to allocate specific components of personal income from the State to county level are rather crude and may also lead to inaccuracies.

Data for a given county in a given year may reflect unusual conditions, such as a servere flood or strike at a major plant, that do not occur frequently. Data in such a year are not representative of normal economic conditions in the county.

These problems should be kept in mind when examining the data presented in this report. Data for an individual county are more likely to be subject to error than the aggregate data for a group of counties. As data from individual counties are added together, the errors tend to cancel each other.

Additional Data

Appendix tables A1 through A3 present employment and income data for 1975-77 and several measures of growth between 1969-71 and 1975-77. Data presented in the main portion of this report were less detailed.

A1--Distribution of employment by source, 1975-77 1/

Source of employment	Group					
	Consistently agricultural	Transitional	Farm-loss	Formerly agricultural	Non-agricultural	Over-shadowed
	Thousand jobs					
Total employment	3,204.3	1,018.6	427.9	11,792.1	78,505.6	30,060.9
	Percent					
Wage and salary employment	70.4	74.3	67.2	82.4	93.1	91.6
Farming	9.3	6.5	7.7	4.2	.6	1.8
Agricultural services	1.3	.6	.8	.8	.3	.5
Fisheries and forestry	2/	2/	2/	.1	2/	2/
Mining	.6	.9	2.2	1.3	.8	.4
Coal mining	.1	.2	.3	.3	.2	2/
Construction	2.6	3.7	2.7	3.8	4.0	3.8
Nondurables manufacturing	5.4	7.9	5.5	9.7	8.2	7.3
Food processing	2.2	3.0	1.4	2.6	1.6	2.2
Durables manufacturing	4.9	6.0	4.0	9.2	12.5	12.9
Transportation, communication, and public utilities	2.8	2.9	2.8	3.5	5.2	4.7
Wholesale trade	4.0	4.1	3.5	3.4	5.1	5.0
Retail trade	9.9	11.1	9.3	12.1	14.5	14.8
Finance, insurance, and real estate	2.0	2.0	1.9	2.5	5.1	4.6
Services	10.1	12.1	10.6	13.0	18.2	17.3
Government	17.6	16.5	16.2	19.0	18.7	18.5
Proprietors	29.6	25.7	32.7	17.6	6.9	8.4
Farm	19.9	16.5	22.5	9.2	1.1	2.1
Nonfarm	9.7	9.2	10.3	8.4	5.8	6.3
Total employment	100.0	100.0	100.0	100.0	100.0	100.0

1/ Three-year averages of employment data were used.
2/ Less than .05 percent.
Source: (16).

A2--Distribution of personal income by source, 1975-77 1/

Source of income	Group					
	Consistently agricultural	Transitional	Farm-loss	Formerly agricultural	Non-agricultural	Over-shadowed
	Million dollars					
Personal income by place of residence	42,569.4	12,295.5	4,749.4	157,221.6	1,163,599.4	454,664.7
	Percent of personal income					
Labor and proprietor's income by industry	63.5	63.7	55.1	64.9	78.6	75.4
Farming	20.1	10.1	5.2	5.6	.6	2.2
Agricultural services	.8	.5	.6	.5	.2	.3
Fisheries and forestry	2/	2/	2/	.1	.1	2/
Mining	.9	1.4	4.0	1.8	1.0	.5
Coal mining	.1	.3	.5	.4	.3	2/
Construction	3.0	4.6	3.9	4.2	4.6	4.4
Nondurables manufacturing	3.9	6.3	4.0	7.3	7.3	6.2
Food processing	1.9	2.9	1.4	2.2	1.5	1.9
Durables manufacturing	4.1	5.4	3.8	8.4	13.5	13.3
Transportation, communication, and utilities	3.2	3.7	3.7	4.0	6.1	5.3
Wholesale trade	3.7	4.0	3.6	3.2	5.4	5.0
Retail trade	6.0	7.1	6.8	7.1	8.0	8.1
Finance, insurance, and real estate	1.8	2.1	2.1	2.2	4.5	4.0
Services	5.9	7.9	6.8	8.2	13.5	12.7
Government	10.0	10.6	10.5	12.5	13.8	13.3
Labor and proprietors' income by type	63.5	63.7	55.1	64.9	78.6	75.4
Wage and salary income	37.4	45.2	41.3	50.6	67.3	63.3
Other labor income	3.0	3.9	3.5	4.4	5.9	5.4
Proprietors' income	23.1	14.6	10.3	9.9	5.4	6.7
Farm	16.6	7.4	2.1	4.0	.4	1.5
Nonfarm	6.5	7.2	8.3	5.9	5.0	5.1

Continued

A2--Distribution of personal income by source, 1975-77 1/--Continued

Source of income	Group					
	Consistently agricultural	Transitional	Farm-loss	Formerly agricultural	Non-agricultural	Over-shadowed
Poverty income	16.3	16.4	19.2	13.6	13.5	13.8
Transfer payments	15.4	16.0	19.0	15.8	13.7	13.6
Personal income by place of residence 3/	100.0	100.0	100.0	100.0	100.0	100.0

1/ Three-year averages of income data were used.
2/ Less than .05 percent.
3/ Sources of income don't add to 100 percent because the residence adjustment and personal contributions to social insurance were omitted.
Source: (16).

A3--Growth in selected employment, income, and population measures between 1969-71 and 1975-77 by group 1/

Item	Group					
	Consistently agricultural	Transitional	Farm-loss	Formerly agricultural	Non-agricultural	Over-shadowed
Total employment (thousand jobs):						
1969-71	2,906.8	895.0	394.1	10,189.4	72,481.5	26,755.0
1975-77	3,204.3	1,018.6	427.9	11,792.1	78,505.6	30,060.9
Percent change	10.2	13.8	8.6	15.7	8.3	12.4
Wage and salary employment (thousand jobs):						
1969-71	1,920.3	623.1	247.8	8,151.1	67,336.4	24,373.0
1975-77	2,257.4	756.8	287.7	9,720.1	73,063.8	27,537.9
Percent change	17.6	21.5	16.1	19.2	8.5	13.0
Labor and proprietors' income (million dollars):						
1969-71	15,610.4	4,559.8	1,758.8	56,297.1	559,506.8	203,860.5
1975-77	27,015.7	7,831.9	2,618.4	102,078.9	914,966.9	342,846.0
Percent change	73.1	71.8	48.9	81.3	63.5	68.2
Wage and salary income (million dollars):						
1969-71	8,785.2	2,845.0	1,033.6	43,475.5	483,659.2	172,839.9
1975-77	15,902.1	5,563.4	1,961.9	79,577.1	783,519.7	287,881.0
Percent change	81.0	95.6	89.8	83.0	62.0	66.6
Personal income (million dollars):						
1969-71	23,068.6	6,762.2	2,777.0	81,950.6	679,998.1	257,430.6
1975-77	42,569.4	12,295.5	4,749.4	157,221.6	1,163,599.4	454,664.7
Percent change	84.5	81.8	71.0	91.8	71.1	76.6
Per capita personal income (dollars):						
1969-71	3,033	2,879	2,589	3,010	4,108	4,074
1975-77	5,381	4,936	4,259	5,211	6,727	6,707
Percent change	77.4	71.4	64.5	73.1	63.8	64.6
Population (head):						
1969-71	7,605,218	2,348,634	1,072,550	27,228,578	165,512,754	63,192,823
1975-77	7,911,411	2,491,232	1,115,192	30,171,096	172,970,911	67,787,451
Percent change	4.0	6.1	4.0	10.8	4.5	7.3

1/ Three year averages of employment, income, and population data were used.
Source: (16).

APPENDIX B
DETAILED CENSUS DATA

Appendix B presents detailed data from the 1969 and 1974 Censuses of Agriculture. However, before these data can be examined, the recent change in the farm definition must be described.

Definition Change

As agriculture has changed, the definition of farm used by the Census Bureau has also changed. The Agricultural Censuses from 1959 to 1969 counted places with 10 or more acres as farms if they had sales of agricultural products of at least $50 during the census year. Places with fewer than 10 acres were considered farms if they sold at least $250 of farm products. Places with sales less than the $50 or $250 minimum were classified as farms if they normally would be expected to sell enough to fit the definition (10).

Because price levels increased substantially and changes occurred in the structure of agriculture, the Census Advisory Committee on Agricultural Statistics, the Office of Management and Budget, and the U.S. Department of Agriculture agreed that another revision in the definition of farm was necessary. For the 1974 Census of Agriculture a farm was defined as an establishment that sold, or normally would be expected to sell, at least $1,000 of agricultural products (10).

Data from the 1974 Census are directly comparable to the 1969 Census data for farms with sales of $2,500 or more, since data for farms with sales less than $2,500 sales were affected by the definition change (10). Nevertheless, this appendix presents data for all farms in both 1969 and 1974. The changes in definition simply represent changes in agriculture over time. Focusing on farms with sales greater than $2,500 would ignore these changes. Including farms with sales lesss than $2,500 also insures that small farmers are well represented in both years.

By 1974, there were only 150,000 agricultural establishments with less than $1,000 in sales, compared with 571,000 in 1969. Some of the small farms in 1969 ceased operations by 1974, while others had sales over $1,000 from increased farm production or from increases in the prices of products sold (10).

The prevalence of establishments excluded by the 1974 definition varied from Census Division to Census Division (table B1). The excluded units formed about 6.2 percent of total agricultural establishments in the United States in 1974, but the percentage ranged from 10.37 percent in New England to 3.15 percent in the West North Central Division. The excluded farms provided a minute portion of agricultural sales throughout the United States.

When 1969 data for all farms or farms with sales under $2,500 are compared with the corresponding 1974 data, part of the decrease in the number of farms and similar data items is due to changes in the definition. This distortion is most severe in New England and the least severe in the West North Central Division. The excluded farms have such a small portion of total sales that there should be little distortion in measures of changes in output.

The 1969 and 1974 Data

Tables B2 through B10 present data from both the 1969 and 1974 Censuses of Agriculture. The main body of the report used less detailed 1974 data only.

B1—Number and sales of establishments excluded by the 1974 definition as a percentage of total agricultural establishments and total sales, 1974

Geographic area	Establishments excluded under the 1974 definition	
	Percent of total agricultural units	Percent of total agricultural sales
United States	6.17	0.05
New England	10.37	0.06
Middle Atlantic	6.37	0.05
East North Central	5.17	0.05
West North Central	3.15	0.02
South Atlantic	8.66	0.08
East South Central	8.33	0.16
West South Central	6.47	0.05
Mountain	6.35	0.03
Pacific	9.45	0.04

Source: (10).

B2--Farm numbers, land in farms, farm size, and value of land and buildings in 1969 and 1974

Item	Group					
	Consistently agricultural	Transitional	Farm-loss	Formerly agricultural	Nonagri-cultural	Over-shadowed
Number of farms:						
1969	606,350	160,112	95,053	1,032,638	835,919	609,682
1974	531,561	138,189	80,049	865,303	698,735	518,555
Land in farms (thousand acres):						
1969	317,629	77,713	64,780	335,330	267,355	160,011
1974	310,960	74,915	62,686	316,188	252,214	153,369
Average farm size (acres):						
1969	524	485	682	325	320	262
1974	585	542	783	365	361	292
Average value of land and buildings per acre (dollars):						
1969	171	157	119	201	244	359
1974	303	281	208	355	402	580
Average value of land and buildings per farm (dollars):						
1969	89,534	75,968	80,788	65,192	78,039	94,326
1974	177,186	152,294	162,591	129,882	145,158	171,588

Source: (11).

B3--Distribution of farms by sales classes, 1969 and 1974

Value of sales	Group											
	Consistently agricultural		Transitional		Farm-loss		Formerly agricultural		Non-agricultural		Over-shadowed	
	1969	1974	1969	1974	1969	1974	1969	1974	1969	1974	1969	1974
	Thousand											
Farms with sales of:												
$2,500 or more	469.3	454.3	114.5	111.3	61.3	58.6	593.7	585.4	459.7	454.3	420.6	408.8
Less than $2,500	137.1	77.3	45.6	26.9	33.7	21.4	439.0	279.9	376.2	244.4	189.1	109.8
Total	606.4	531.6	160.1	138.2	95.1	80.0	1,032.6	865.3	835.9	698.7	609.7	518.6
	Percent											
Farms with sales of:												
$40,000 or more	10.7	30.0	10.5	25.9	7.6	18.7	6.8	17.0	7.4	17.2	10.8	26.0
$20,000 to 39,999	17.4	19.5	15.3	17.3	11.6	13.7	9.9	11.8	10.5	11.6	14.7	16.1
$10,000 to 19,999	20.5	15.7	17.7	15.3	15.5	14.2	12.5	12.8	11.8	11.9	16.3	14.6
$ 5,000 to 9,999	16.7	12.0	15.5	12.6	15.6	13.9	14.1	13.4	12.4	12.6	14.8	12.6
$ 2,500 to 4,999	12.0	8.3	12.6	9.4	14.3	12.6	14.1	12.5	12.8	11.7	12.4	9.5
Less than $2,500	22.6	14.5	28.5	19.5	35.5	26.8	42.5	32.3	45.0	35.0	31.0	21.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: (11).

B4—Distribution of farms with sales over $2,500 by organization, 1969 and 1974

Organization	Group											
	Consistently agricultural		Transitional		Farm-loss		Formerly agricultural		Non-agricultural		Over-shadowed	
	1969	1974	1969	1974	1969	1974	1969	1974	1969	1974	1969	1974
	Percent											
Individual or family	85.0	89.3	85.4	89.5	86.2	90.5	85.6	89.9	85.5	89.2	84.4	88.1
Partnership	13.5	9.1	13.0	8.8	12.2	7.8	12.6	8.4	12.3	8.3	13.3	9.4
Corporation 1/	1.0	1.4	1.0	1.4	1.0	1.5	1.2	1.5	1.6	2.3	1.7	2.2
Other	.6	.2	.6	.2	.6	.2	.6	.2	.6	.2	.6	.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1/ A large number of farms were wrongly classified as corperations in the 1969 Census of Agriculture. These errors have not been corrected (9).

Source: (11).

B5--Selected crops harvested, livestock inventories, and livestock sales by group, 1974

Types of crops and livestock	Group					
	Consistently agricultural	Transitional	Farm-loss	Formerly agricultural	Non agricultural	Over-shadowed
			Thousand acres			
Crops harvested:						
Corn for all purposes	27,145	6,267	2,039	20,084	16,794	20,394
Sorghum for all purposes	6,097	977	1,286	3,859	2,570	1,987
Soybeans for beans	15,875	3,815	1,287	16,821	10,317	13,058
Peanuts for nuts	285	77	204	709	93	184
Wheat	33,226	3,907	3,704	12,019	10,098	8,524
Other small grain for grain	11,387	1,568	503	5,933	4,780	5,396
Cotton	3,536	863	1,597	4,526	1,694	2,730
Tobacco	209	65	11	414	177	339
Hay crops	16,351	4,424	2,710	17,485	15,259	9,301
Vegetables and melons	517	44	29	1,294	1,235	1,744
Land in orchards	864	66	43	2,172	1,043	2,311
			Thousand head			
Livestock inventory (December 31): 1/						
Cattle and calves	32,660	8,696	5,942	38,196	27,670	19,950
Beef cows	11,235	3,195	2,608	14,859	9,234	5,102
Milk cows	2,063	583	170	3,559	4,273	3,413
Hogs and pigs	16,962	5,132	1,335	13,568	8,420	11,658
Sheep and lambs	3,785	1,685	912	4,918	4,041	2,797
Livestock sales:						
Cattle and calves	24,529	5,485	3,876	20,815	15,310	13,581
Hogs and pigs	29,890	8,834	2,417	24,044	14,482	20,196
Sheep and lambs	3,894	1,309	887	3,897	3,415	2,597

1/ Memory bias may affect inventory items. Although Census respendents were asked to report inventories as of December 31, 1974, a special study indicates the many reported inventories at the time they answered the questionnaire (9)

Source: (11)

B6—Percent of total crops harvested, livestock inventories, and livestock sales in each group, 1974

Types of crops and livestock	Group						U.S. total 1/
	Consistently agricultural	Traditional	Farm-loss	Formerly agricultural	Non-agricultural	Over-shadowed	
	Percent of total U.S. acres						
Crops harvested:							
Corn for all purposes	37.5	8.7	2.8	27.8	23.2	28.2	100.0
Sorghum for all purposes	41.2	6.6	8.7	26.1	17.4	13.4	100.0
Soybeans for beans	33.0	7.9	2.7	35.0	21.4	27.1	100.0
Peanuts for nuts	20.8	5.6	14.9	51.8	6.8	13.5	100.0
Wheat	52.8	6.2	5.9	19.1	16.0	13.5	100.0
Other small grain for grain	47.1	6.5	2.1	24.5	19.8	22.3	100.0
Cotton	28.9	7.1	13.1	37.1	13.9	22.3	100.0
Tobacco	23.9	7.4	1.2	47.2	20.2	38.7	100.0
Hay crops	29.1	7.9	4.8	31.1	27.1	16.5	100.0
Vegetables and melons	16.6	1.4	.9	41.5	39.6	55.9	100.0
Land in orchards	20.6	1.6	1.0	51.8	24.9	55.2	100.0
	Percent of total U.S. head						
Livestock inventory:							
Cattle and calves	28.9	7.7	5.3	33.8	24.5	17.6	100.0
Beef cows	27.3	7.8	6.3	36.1	22.5	12.4	100.0
Milk cows	19.4	5.5	1.6	33.4	40.1	32.1	100.0
Hogs and pigs	37.3	11.3	2.9	29.9	18.5	25.7	100.0
Sheep and lambs	24.8	11.0	5.9	32.1	26.3	18.2	100.0
Livestock sales:							
Cattle and calves	35.0	7.8	5.5	29.7	21.9	19.4	100.0
Hogs and pigs	37.5	11.1	3.0	30.2	18.2	25.4	100.0
Sheep and lambs	29.1	9.8	6.6	29.1	25.5	19.4	100.0

1/ The consistently agricultural through nonagricultural groups sum to 100 percent. The overshadowed counties' data are already included in the other groups.
Source: (11).

B7--Off-farm work reported by farm operators in each group, 1974 1/ 2/

Item	Group					
	Consistently agricultural	Transitional	Farm-loss	Formerly agricultural	Nonagricultural	Overshadowed
	Percent					
Farm operators by days of off-farm work:						
None	56.7	52.9	48.9	41.8	39.1	46.9
1 to 49	9.4	8.4	8.1	6.7	6.2	7.0
50 to 99	3.6	3.4	3.7	3.5	3.1	3.2
100 to 149	3.2	3.1	3.9	3.5	3.3	3.1
150 to 199	4.1	4.6	5.1	5.5	5.6	4.7
200 or more	23.0	27.7	30.4	39.0	42.7	35.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Principal occupation:						
Farming	77.7	72.4	66.9	58.4	54.0	65.5
Other occupation	22.3	27.6	33.1	41.6	46.0	34.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

1/ Applies only to sole proprietors and partners.
2/ Data from 1969 was incomplete and is not presented.
Source: (11)

B8--Tenure of farm operators by groups, 1969 and 1974

Tenure	Group											
	Consistently agricultural		Transitional		Farm-loss		Formerly agricultural		Non-agricultural		Over-shadowed	
	1969	1974	1969	1974	1969	1974	1969	1974	1969	1974	1969	1974
	Percent											
Full owner	52.0	52.4	57.3	57.4	56.6	56.9	66.4	65.5	66.9	64.9	61.1	60.3
Part owner	30.2	32.2	27.1	29.2	28.3	30.1	22.3	24.7	22.5	25.5	23.7	26.5
Tenant	17.8	15.4	15.7	13.4	15.0	13.0	11.3	9.7	10.6	9.6	15.2	13.2
Total farm operators	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: (11).

B9—Age distribution of farm operators by group, 1969 and 1974 1/

Age	Group											
	Consistently agricultural		Transitional		Farm-loss		Formerly agricultural		Nonagricultural		Overshadowed	
	1969	1974	1969	1974	1969	1974	1969	1974	1969	1974	1969	1974
	Percent											
Under 25	2.4	3.1	2.1	2.8	2.2	2.8	1.8	2.0	1.7	1.8	2.0	2.3
25 to 34	11.2	11.3	10.7	11.2	10.2	10.9	9.6	10.3	9.5	10.0	10.7	10.9
35 to 44	19.8	17.3	19.6	17.7	18.0	16.2	18.6	17.5	19.3	18.0	20.6	18.3
45 to 54	26.9	25.6	26.5	25.3	24.9	24.1	26.2	24.9	26.7	25.7	27.6	26.3
55 to 64	25.5	26.0	26.0	25.6	26.7	26.1	26.2	25.9	25.3	25.6	24.9	25.8
65 and over	14.1	16.6	15.0	17.5	18.0	19.9	17.5	19.3	17.4	19.0	14.3	16.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1/ Applies only to sole proprietors and partners.
Source: (11).

Table B10—Number and incidence of Black and Other Race farm operators 1/

Group	Black and Other Race farm operators	All farm operators	Incidence of Black and Other Race farm operators 2/
	Number		Percent
Consistently agricultural	10,074	531,561	1.9
Transitional	4,134	138,189	3.0
Farm-loss	2,321	80,049	2.9
Formerly agricultural	28,596	865,303	3.3
Nonagricultural	14,240	698,735	2.0
Overshadowed	14,448	518,555	2.8
Total U.S. 3/	59,365	2,313,837	2.6

1/ Data for 1969 is not presented because it includes Blacks only.
2/ (Black and Other Race operators divided by total operators) x 100 percent.
3/ The consistently agricultural group through the nonagricultural group sum to the U.S. total. The overshadowed counties are already included in the other groups.
Source: (11).

APPENDIX C
ADDITIONAL AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE (ASCS) DATA

C1—Total ASCS participating farmers and amounts paid distributed by groups in 1978 and 1979 1/

Item	Farmers receiving payments		Amount paid		Amount per farmer	
	1978	1979	1978	1979	1978	1979
	Thousand		Million dollars		Dollars	
U.S. total	1,529.7	1,130.7	2,686.2	1,400.1	1,756	1,238
	——— Percent of Total ———					
Distribution by group						
Consistently agricultural	33.0	34.5	44.8	42.4	2,388	1,522
Transitional	7.1	7.5	8.3	7.4	2,036	1,230
Farm-loss	4.7	4.8	6.0	8.2	2,231	2,112
Formerly Agricultural	31.5	31.0	24.1	25.0	1,343	998
Nonagricultural	23.7	22.3	16.8	17.1	1,248	949
Total	100.0	100.0	100.0	100.0	NA	NA
Overshadowed	18.1	18.1	16.1	17.3	1,555	1,182

NA-Not applicable
1/ Excludes all Hawaiian and a small amount of Georgian data not provided on a county basis. Also excludes data from Puerto Rico and the Virgin Islands.
Source: (12).